13. The circuit of claim 12 wherein m is equal to the integer 3.

14. The circuit of claim 13 wherein said modulator is a delta-sigma modulator.

15. The circuit of claim 3 wherein the integer m is an odd integer and wherein said modulator includes a two-level comparator modified to allow the polarity of the next output bit to change only if there is an odd number of previous consecutive bits of the same polarity.

16. The circuit of claim 15 wherein m is equal to the integer 3.

17. The circuit of claim 16 wherein said modulator is a delta-sigma modulator.

18. A method for producing a bipolar standard voltage source utilizing Josephson junction devices comprising

providing for a modulator to produce an output sequence of zeros and ones to represent an input mathematical model of a desired voltage waveform;

providing for the generation of a two-level electrical signal representing said mathematical model in accordance with said output sequence;

providing for a sinusoidal drive frequency synchronized to said two-level signal;

providing for a Josephson quantizer to be driven by the combination of said two-level signal and said sinusoidal drive frequency; and

providing for the bipolar filtering of the output signal from said quantizer to produce a physical replication of said mathematical model

wherein said combination driving said Josephson quantizer is bipolar and thereby enables a significantly increased bipolar output voltage amplitude relative to methods which do not employ a sinusoidal drive.

19. The method of claim 18 further including

providing for a sampling frequency, f_s, to synchronize said two-level signal and said drive frequency;

providing for said drive frequency to be set to one of half integer multiples of said sampling frequency and equal to $mf_s/2$, where the integer m is $\geqq 2$; and

providing for an in-phase relationship between said two-level signal and said drive frequency.

20. The method of claim 19 wherein provision is made for setting m to an odd integer and wherein said modulator is a standard modulator that generates three output levels, said method further including

providing for a three-level to two-level transformation of modulator output wherein low corresponds to two consecutive bits 00, middle corresponds to 01, and high corresponds to 11 to fix the relative phase between the two-level signal and the drive sine wave so that in-phase condition applies to all bits.

21. The method of claim 19 wherein provision is made for setting m to an odd integer and wherein said modulator is a two-level modulator modified to allow a comparator within said modulator to change the polarity of the next bit only if there is an odd number of previous consecutive bits of the same polarity, and thereby directly generate two-level codes at the in-phase condition.

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